Contractor Questions & Answers For Solicitation No. SCO150-14-R-N012 Construction of CNP Base - PSIB at Bucaramanga Santander— Colombia

Following is the list of the questions received from the contractors participating in the above solicitation. Each question is followed by the Government's response.

**Question #1:** Are there some details of foundation of the lodging module? Because we found that every module has different height of cyclopean concrete and different dimensions of footing beams?

Answer: Refer to drawings S-2 and S-4 which shows in detail the foundation system and the heights of the cyclopean concrete and the footing beam which do not vary, it stays the same for all the modules.

**Question #2:** Me gustaría saber cuál sería el procedimiento para participar con mi alianza estratégica (Estimated Translation: I would like to know what is the procedure in order to participate with a strategic Alliance).

Answer: Refer to section L of the solicitation for instructions on joint venture submissions and other instructions.

**Question #3:** El mobiliario que aparece en los planos es solo indicativo o se debe suministrar también? (Estimated Translation: Furniture that appears on the planes is only indicative or must be also supplied?)

Answer: The furniture for the offices and lodging areas is not part of the scope of the Project; the furniture for the offices shown on the drawings is just for reference.

**Question #4:** Solicitamos un plano en donde se delimiten las areas que uds consideraron como las diferentes secciones:

- Exterior.
- Shelter.
- Office,
- Barrack,
- Bath room section

Ya que cada una de ellas tiene los mismos items, pero queremos estar seguros de como hacen uds la división de esos espacios.

(Estimated Translation: We asked for a drawing where it is delimit the areas that were considered for the different sections - Exterior, Shelter, Office, Barrack, Bath room section - Since each of them has the same items, but we want to make sure how you make te division of those spaces)

Answer: The bid chart as well as architectural drawing A-2 of the actual solicitation is very clear on the different areas for the project.

**Question #5:** Solicitamos una aclaración en cuanto a los acabados en general, después de leer las especificaciones no es claro del todo como son los acabados de cada espacio, seguramente para uds que conocen de memoria el proyecto desde hace mucho tiempo la respuesta es evidente, sin embargo no es tan claro para nosotros.

(Estimated Translation: We requested a clarification in terms of finishes in general, after reading the specifications is not clear at all such as the finishes of each space, probably for you who knows by memory the project from a long time ago the answer is self-evident, however it is not so clear for us)

Answer: A finished Schedule is being posted as part of amendment #2 of the solicitation.

**Question #6:** En el plano T1 definir por favor la distancia hasta el ISP. (Estimated Translation: In the drawing T1 please define the distance to the ISP)

Answer: As an indication the following measurements are given but it is up to the contractor to verify the actual measurements on site and any difference will be assumed by the contractor at no extra cost to the government. Refer to attached drawing.

*Question #7:* En los cortes del plano S6, el anden interior, (sidewalk) tiene un nivel de +0.10, y en planos en +0.00, cual es el nivel para esos andenes?

(Estimated Translation: In the sections of drawing S6, the interior sidewalk has a level of + 0.10, and in drawings is + 0.00, which is the level for these sidewalks?)

Answer: Refer to drawings S-1 & A-2. The sidewalk level is +0.00.

**Question #8:** Cual es el nivel del anden exterior? es el mismo +0,00 o es mas bajo? (Estimated Translation: Which is the level of the exterior sidewalk? It is the level + 0.00 or is it lower?)

Answer: The exterior sidewalk level is +0,00.

*Question #9:* En el plano S5 no es claro el detalle de union de las vigas de cubierta, en los detalles no aparece la viga de 200 x 27.9 y ademas aparecen platinas mas grandes que los perfiles mencionados, por favor aclararlo.

(Estimated Translation: In drawing S5 it is not clear the detail of joint of beams for the roof cover, beam  $200 \times 27.9$  does not appear in the details and also it is shown larger metal plates than the profiles mentioned, please clarify)

Answer: Question answered by the structural designer: "On the details of the cover shown in drawing S-5, profile C200 does not appear because is not required there; the design adopts the main beams as section  $200 \times 100 \times 6$ mm. Details indeed show metal plates of union between the two main elements of the cover, which are flaps formed by plates to be welded to the main beams and welded or bolted together."

*Question #10:* Al tener la obra dividida en 3 placas de cimentación diferentes, con una cubierta común, pensamos que en caso de que haya algún movimiento la cubierta no va a soportar, la embajada toma ese riesgo?

(Estimated Translation: Having the work divided into 3 different foundation slabs, with a common roof cover, we believe that in case you have some cover movement it will not hold, is the Embassy willing to take this risk?)

Answer: First, a certified structural designer worked on the structural design of the Project giving us warranty of all the structural considerations of the design based on the NSR-10 and previously approved by the construction authorities (La Curaduria) in Bucaramanga. And second this system has been done in other locations in which the seismic requirements are even more extreme and it is

actually working in a very satisfactory manner. So not risk is implied for the proposed foundation system.

**Question #11:** Los baños tienen agua caliente? (Estimated Translation: Do the bathrooms have hot water?)

**Answer:** No hot water has to be considered for the bathrooms in the proposal.

*Question #12:* Plano E1, el Duct Bank tipo 2, que esta 75 cm bajo la placa, choca con la cimentación de los dormitorios ya que están las vigas de amarre y la cimentación que en total es de 1.00 metro.

(Estimated Translation: Drawing E1, Duct Bank type 2, which is 75 cm under the slab, collides with the Foundation of the lodging building since they are tie beams and the Foundation which has a total depth of 1.00 meter)

Answer: In this case it is acceptable to install this duct bank at a depth below the foundation of the building.

Question #13: No entendemos bien el concepto de las ventanas con rejillas metálicas en Aluminio con aire acondicionado al interior, esta prevista la perdida de eficiencia? (Estimated Translation: Do not understand well the concept of windows with metal louvers in aluminum with air conditioning on the interior, this provided loss of efficiency?)

Answer: The aluminum louvers considered for the lodging and administrative areas shall be covered or sealed with a window glass that fits the dimensions stated on the architectural drawings. The intention of the louvers is just as a backup source of ventilation in case the A/C units are out of order.

**Question #14:** En el cuarto Eléctrico, la cubierta cubre la parte que esta delimitada con malla eslabonada, sin embargo no hay soporte para la cubierta, esos soportes en que están planteados? (Estimated Translation: In the electric room, the roof cover covers the parts that is bounded with chain link mesh, however there is no support for the roof, are those supports taken into account?)

Answer: Refer to drawing A-7 of the architectural drawings. The roof cover is intended for the whole extension of the electrical shelter.

**Question #15:** Para hacer el cuarto eléctrico es necesario hacer un muro de contención. (Estimated Translation: To make the electrical room it is necessary to make a retaining wall.)

Answer: No retention wall shall be included for this electrical shelter as confirmed by the structural designer.

*Question #16:* Solicitamos una extension de una semana para la entrega de la propuesta. (Estimated Translation: We asked for an extension of one week for the delivery of the proposal)

Answer: An amendment to the solicitation was issued on the embassy web page to extend the proposal due date till August 11, 2014.

**Question #17:** If we compare the structural drawings with the architectural ones, in the assistant office we notice that the ground levels are different and so the structural walls. The Tie beams and structural walls don't appear in the structural drawings.

Answer: The ground level of the assistant office is +0.10. No structural wall shall be included in this area, the walls shall be done in superboard material only for assistant area in the part were no structural wall is shown. And also no aerial tie beam shall be included as shown in drawing S-5.

Question #18: Is there any access for the fenced área? If so please provide details and specifications (El área encerrada en malla no cuenta con ningún acceso. ¿Debe contemplarse alguno? ¿Dónde debe ubicarse esta puerta? ¿Cuáles sus especificaciones y detalles?

Answer: Refer to the attached detail for the location and specification of the access door for the chain link fence area.

Question #19: There are NO details about fence. For the mesh: Caliber, size of the separation, height, etc.). For the posts: material, diameter, depth of foundation, type of foundation. Please provide details (Los planos no contienen especificaciones de la malla (calibre, tamaño del hueco, templetes) ni de los postes (profundidad, cimentación, diámetro, calibre del material) Suministrar detalles.

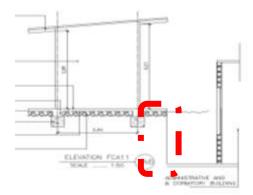
Answer: The chain link fence shall be constructed using a 10 gauge (interior), (8 gauge exterior) wire mesh with a 2-Inch x 2-Inch opening, which shall meet the rule of 80 grams of galvanized/m2, and the galvanized percentage shall be certified in the offer. The post shall be galvanized steel with a diameter of 2-Inch. The steel plate that according to the drawing ties the wire mesh to the steel post shall be a 3/4-Inch plate.

*Question #20:* Please clarify details of the union between metal elements of the roof structure. Are the connections welded, screwed? (Aclarar detalle de unión entre perfiles de estructura de cubierta PAG-C-220-80-1.9mm), (¿soldados, con pernos?)

Answer: The connections shall be welded.

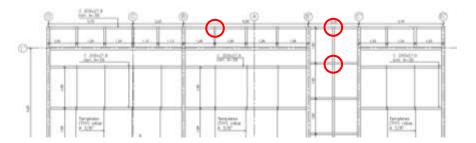
*Question #21:* Is there a retention Wall in the scheme below? Please clarify if required (Muro de contención no planteado. Aclarar si es requerido):

## Answer: Refer to Question #15.



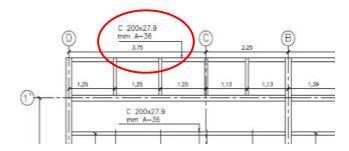
*Question #22:* Please clarify detail of the connection showed below (¿Cómo es el detalle (en la estructura de cubierta) para las uniones señaladas?)

Answer: Refer to the details shown on drawing S-5. The connections shall be welded.



Question #23: Please clarify dimensions of the purlins for the roof metal structure. Profile C200x27.9 mm doesn't exist or isn't comercial available. (Aclarar las dimensiones del tipo de perfil a utilizar (C-200x27.9mm A-36). No es un perfil que exista de acuerdo a las cartillas comerciales)

Answer: The Structural designer confirmed that the profile specified should be is C200x27.9 mm and that it can be found as a commercial item by many providers in Bogota.



*Question #25:* Please confirm if tree and ROOTS remotion will be performed by COLNAP (Policia Nacional). (Confirmar si la remoción de los árboles, y sus raíces, que se encuentran en el área de trabajo están fuera del alcance del trabajo)

Answer: The CNP will cut and remove the trees shown during the site visit along the project site. However the roots shall be included as part of the earthwork item in the bidding chart, and the removal shall also be included.

*Question #26:* Please confirm cost and procedure for provisional supply of water and electrical power? (Confirmar si se deben realizar trámites para la instalación de acometidas provisionales y medidores con las ESP de la ciudad de Bucaramanga para el suministro de agua y energía eléctrica)

Answer: The Contractor shall be include as part of his proposal in the Temporary facilities item the temporary services for the construction project as well as the process to connect this temporary services to the project which he shall find out with the local services authority. And also the contractor shall include the final counters for water and electrical main feeds.

*Question #27:* Drawing S-2. There is NO DETAIL of lintel for Windows and doors. Please provide (Plano S-2 NO HAY detalle del dintel para ventanas y vanos de puertas. Favor aclarar detalle y localización de dichos dinteles)

Answer: Refer to drawing S-2. Lintels and support shall be considered in reinforced concrete.

*Question #28:* Plano HS1. Please confirm diameter of the pipe to connect new sewage manholes (Confirmar diámetro de la tubería de salida que comunica los "sewage manhole".)

Answer: Refer to the attached detail for the diameter of the exterior sewage pipes.

**Question #29:** Plano E1. Please confirm length of the new raceway for electrical power supply (Favor confirmar la longitud de la canalización nueva para la acometida eléctrica).

Answer: As an indication the following measurements are given but it is up to the contractor to verify the actual measurements on site and any difference will be assumed by the contractor at no extra cost to the government, new feeder includes approximately 70 mts of new duct bank and 230 mts of new feeder wiring.

*Question #30:* Plano E1. Please confirm length of the existing raceway. (Favor confirmar la longitud de la canalización eléctrica existente para la acometida eléctrica.

Answer: See Answer to Question 29.

*Question #31:* Please confirm thickness of the existing concrete slab. (Favor confirmar el espesor de la placa de concreto existente por donde se deberá canalizar la acometida eléctrica y construir los sewage manholes)

Answer: The contractor shall consider a thickness between 20- 25 cm for the existing concrete slab.

*Question #32:* Plano E4 D4. Please confirm type, diameter, length of the air terminals for the lightning protection system. (Favor confirmar el tipo, diámetro y longitud de los terminales del sistema de protección de pararrayos)

Answer: Diameter and other characteristics of Air Terminals are indicated in Specification Section 26 41 00.00 40-2.2.1 the length shall be at least 0.6m or as required to comply with the rolling ball calculation shown in drawing E3.

*Question #33:* Plano E8. Please confirm components (TVSS?, power meter type PM820?, barrajes?, dead front?) And type of protection for the main distribution panel board MDPB. (Favor confirmar los componentes (TVSS?, Medidor tipo PM820?, barrajes?, frente muerto?) y tipo de protección IP para el tablero principal que se localizara en el nuevo electrical house).

Answer: TVSS equivalent to SQUARE-D SURELOGIC Family additional information is found in drawing E-10 and Specification Section 26 09 13. Power Meter equivalent to PM820 and as per specification Section 26 09 13-2.1.2. Panel Boards shall comply with standards and characteristics as per specification section 26 24 16.00 40, enclosure types as per location and corresponding NEMA type.

*Question #34:* Please confirm capacity and type of the breakers to be installed in the existing electrical house. (Confirmar los dispositivos de protección breakers: capacidad y tipo) y demás componentes que deberán instalarse en el cuarto eléctrico existente)

Answer: The information for new equipment in the Main Substation can be found in drawing E-10, a 3X175A industrial type breaker (not shown in the drawing) must be installed in the existing main distribution panel; additional works to connect to existing equipment shall be verified by the contractor and included in the proposal.

*Question #35:* Plano E9. Please confirm type and capacity of the TVSS to be installed in the secondary panel boards. Will be installed TVSS in these secondary panel boards? (Confirmar la capacidad y tipo de los dispositivos de protección (SI VAN) en cada uno de los tableros secundarios)

Answer: Provide TVSS as per drawing and in compliance with standards in the specifications also refer to answer to question 33.

Question #36: Plano T1. Please confirm length, type of connection (fiber optic?), dispositives to be supplied and installed in the connection point and details needed to the "connection to ISP by contractor. In the site visit there was no definition about the connection point for the ISP. (Favor confirmar longitud, tipo de conexión (fibra óptica, etc), dispositivos a suministrar en el punto de conexión y demás detalles necesarios para la "conexión to ISP by contractor". Aclaro que en la visita NO se definió ni se puedo visitar el punto de conexión para el ISP)

Answer: As an indication the following measurements are given but it is up to the contractor to verify the actual measurements and equipment on site and any difference will be assumed by the contractor at no extra cost to the government, the distance to the ISP connection point is as shown in attachment, the rack shall include a FO wire management tray and a FO patch panel as well as the ISP modem this equipment shall be provided as per the Internet Service Provider Requirements. Also refer to response to question 6.

Question #37: Plano T3. Please provide details and further specifications for the cameras of the CCTV system: Resolution, night work mode, etc. We recommend you to provide brand and model of the proposed cameras. (Favor aclarar: resolución, trabajo en modo nocturno, y demás especificaciones para las cámaras del sistema CCTV. Recomendamos nos den una marca y modelo de referencia para poder cotizar dichas cámaras)

Answer: Information for the cameras is located in section 28 23 23.00 00 10-2.5 through 2.7 of the specifications.

**Question #38:** Plano T3. Please provide capacity and further details of the recording device. We recommend you to provide brand and model of the proposed cameras. (Las cámaras de CCTV irán conectadas a un equipo de grabación? Si es afirmativa la respuesta favor proveer: capacidad de grabación y demás características de dicho equipo de grabación. Recomendamos nos den una marca y modelo de referencia para poder cotizar el mencionado equipo).

Answer: Information for the recording device is in section 28 23 23.00 00 10-2.10 of the specifications.

**Question #39:** Plano T3 (numeración repetida). Please provide characteristics and details of the equipment to be installed in the telecomm rack: (Favor proveer las características de los equipos que componente el rack a saber entre otros):

- 1.1 ASA Firewall VPN concentrator
- 1.2 FO enclosure as needed for ISP connection
- 1.3 Server
- 1.4 Fan kit (if required).

Characteristics of the rack itself.

Answer: Information for the mentioned equipment can be found in section 27 10 00-Part 2 of the specification. For ISP related items please refer to answer to question 36. Provide Fan Kit as per TIA standard.

Question #40: Please provide technical description of the works to be performed in the electrical and communication feature of work. Specifications provided already are very general and doesn't allow us to quote accurately the Works to be performed. (Favor proveer una descripción técnica del alcance de los trabajos eléctricos y de voz&datos del proyecto. Las especificaciones son muy generales y no nos permiten definir con claridad los componentes de estos mencionados sistemas.

Answer: The contractor shall provide, install, test and commission all items to deliver fully functional systems as detailed in the drawings complying with the specifications and the standards mentioned there in. The scope is depicted in the drawings and the details on procedures, installation and materials can be found in the specification sections.

Question #41: Main Feeder Wire is #3 or 3/0 AWG THHN?

Answer: Refer to drawing E-10; Use #1 AWG in the 480V DELTA portion and #3/0 in the 208/120 WYE portion.

Question #42: Air Conditioning (AC) drainage not shown

Answer: As per specification section 23 81 00.00 20-1.4.2 it is up to the contractor to submit a shop drawing detailing the condesate line including accessories for approval.

Question #43: A.C. CIAC Brand is mandatory?

Answer: Brand is not mandatory however it is up to the contractor to demonstrate equivalency and compliance to the specifications in the submittals.

*Question #44:* Chain Fence Link Specification not shown

Answer: Refer to Question #19.

*Question #45:* Should Furniture be quoted?

Answer: Refer to Question #3.

Question #46: Electric Ditch detail not shown

Answer: Provide with the following internal dimensions 30cm x 50cm, layout as per drawing E-8.

*Question #47:* Technical Specification of ASA VPN Concentrator, Network Video Recorder, Server and Raid Storage not shown

Answer: Refer to specifications 27 10 00-PART 2 for ASA (2.2.3) and Server (2.2.2); And to Specification 28 23 23.00 10-PART 2 for NVR (2.10) and Storage (2.10).

Question #48: Technical Specification of PTZ IP Cameras (Zoom, TVL, lens, resolution, etc)

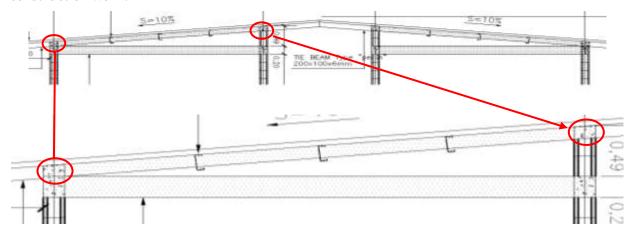
Answer: Refer to specification 28 23 23.00 10-Part 2 paragraphs 2.5 through 2.7.

Question #49: Technical Specification of Biometric Digital Lock

Answer: Refer to Specification section 28 20 01.00 10-2.3 and 2.3.1 for Basis of design brand and model number.

**Question #50:** Drawing S6. Please clarify specifications of concrete elements rounded in red color:

Answer: Refer to drawing S-6. Shop drawings shall be made by the contractor before beginning construction work.



**Question #51:** According to soils study, which is the recommended depth of foundation? According to the same study which is the thickness of organic material to be removed and replaced?

Answer: Refer to drawing S-4 for the "Typical Section including actual levels" which specifies the depth of the foundation and the existing natural terrain.

**Question #52:** Perimeter sidewalk must be built around building? If so, please determine its specifications (thickness, width, etc)

Answer: Refer to drawing S-2 for the "Typical foundation detail". Sidewalk thickness is 10 cm.

Question #53: Please clarify specifications of ceiling to be supplied and installed.

Answer: Mineral Fiber Ceiling: The Contractor shall supply and install a 'Celotex' mineral- fiber ceiling with a sand texture and indented edge, or USG equivalent, with suspension tape and supported on 1-inch x ¾-inch visible and automatically-assembling metal profiles, and with a white electrostatic paint finish only for the administrative modules. The Contractor shall verify that the ceiling profiles are indented from the ceiling panels, and that the ceiling sheets measure 0.60 m x 0.60 m. The Contractor shall verify that when ceilings are being fitted the small pieces or sections of panels of less than one third panel size shall not be accepted. The Contractor shall guarantee that the Ceiling is appropriately leveled, and with well-finished joints between profiles.

The Contractor shall follow the manufacturer's instructions for storing, transporting and fitting of the ceiling. The contractor shall leave on site an amount equivalent to 3% of the quantity of the "Celotex" sheets for replacement purposes and effects, together with profiles so that maintenance or repairs can be done in the future.

*Question #54:* Please clarify specifications of ceramic tiles to be installed, at floors of administrative area, at floors at dormitories, at floors at bathrooms and at walls at bathrooms and cafeteria.

Answer: Refer to the Specification Section 093013 on ceramic tile. Also refer to Question #6.

*Question #55:* Please clarify finishing at interior walls: there must have stucco, plaster and painting? Or just painting over stucco? In the same way, please clarify finishing at exterior walls.

Answer: Refer to Question #6.

*Question #56:* Please clarify specifications of toilets, washbasins and urinals to be supplied and installed.

Answer: Refer to the Specification Section 102113 on Toilet Compartments.

Question #57: Furniture must be supplied by contractor? If so, please clarify specifications.

Answer: Refer to Question #3.